

Wood Bison Management Plan for Lower Innoko-Yukon River in Westcentral Alaska, 2024-2034

Lower Innoko-Yukon River Wood Bison Management Planning Team



Photo by Doug Lindstrand.



Wood Bison Management Plan for Lower Innoko-Yukon River in Westcentral Alaska, 2024–2034

PREPARED FOR THE LOWER INNOKO-YUKON RIVER WOOD BISON MANAGEMENT PLANNING TEAM BY:

C. Tom Seaton
Wood Bison Project Biologist

Luke R. Rogers
Wood Bison Project Assistant Biologist

REVIEWED BY:

Lincoln Parrett
Regional Supervisor, Region III

PUBLISHED BY:

Sky M. Guritz
Publications Coordinator

©2024 Alaska Department of Fish and Game

Alaska Department of Fish and Game
Division of Wildlife Conservation
PO Box 115526
Juneau, AK 99811-5526



The Alaska Wood Bison Restoration Project has been funded mainly by the Federal Wildlife Restoration Program, and in part by grants from BLM, Safari Club International Foundation, and donations from many others.

To see a full list of contributors, visit the supporters page at <http://www.adfg.alaska.gov/index.cfm?adfg=woodbisonrestoration.supporters>.

Wildlife Management Plans set out specific plans for management of wildlife and habitat in certain areas. They review available data and other information, legal requirements, wildlife population and habitat needs, public comment, and other information and set out a course of action for a specified period of time. This plan was drafted by ADF&G staff on the basis of meeting notes and outcomes and reflects the desires of the planning team, subject to the respective authorities of the legislature, Alaska Board of Game, and ADF&G Commissioner.

This Wildlife Management Plan was reviewed for publication by Lincoln Parrett, Regional Supervisor, Region III, for the Division of Wildlife Conservation.

Wildlife management plans are available via the Alaska Department of Fish and Game's public website (www.adfg.alaska.gov) or by contacting Alaska Department of Fish and Game's Division of Wildlife Conservation, PO Box 115526, Juneau, AK 99811-5526; phone: (907) 465-4190; email: dfg.dwc.publications@alaska.gov. The plan may also be accessed through most libraries, via interlibrary loan from the Alaska State Library or the Alaska Resources Library and Information Services (www.arlis.org). To subscribe to email announcements regarding new technical publications from the Alaska Department of Fish and Game, Division of Wildlife Conservation please use the following link:
<http://list.state.ak.us/mailman/listinfo/adfgwildlifereport>.

This document, published in PDF format only, should be cited as:

Lower Innoko-Yukon River Wood Bison Management Planning Team. 2024. Wood bison management plan for lower Innoko-Yukon River in Westcentral Alaska, 2024–2034. Alaska Department of Fish and Game, Wildlife Management Plan ADF&G/DWC/WMP-2024-1, Juneau.

Please contact the authors or the Division of Wildlife Conservation at (907) 465-4190 if you have questions about the content of this plan.

The State of Alaska is an Affirmative Action/Equal Opportunity Employer. The Alaska Department of Fish and Game complies with Title II of the Americans with Disabilities Act of 1990. This document is available in alternative communication formats. If you need assistance, please contact the Department ADA Coordinator via fax at (907) 465-6078; TTY/Alaska Relay 7-1-1 or 1-800-770-8973.

ADF&G does not endorse or recommend any specific company or their products. Product names used in this publication are included for completeness but do not constitute product endorsement.

Cover Photo: Wood bison adult male at the Alaska Wildlife Conservation Center, Girdwood, Alaska 2019. Photo by Doug Lindstrand.

Contents

Dedication.....	4
Vision Statement.....	5
Background.....	5
Planning Process.....	8
Goals, Objectives, and Actions.....	10
Goal 1: Increase or grow the wood bison herd in the lower Innoko-Yukon River area and manage it for long-term viability.	10
Goal 2: Ensure adequate staffing and funding for all phases of wood bison management. ...	10
Goal 3: Minimize conflicts between humans and wood bison.	11
Goal 4: Encourage cooperation among land managers to ensure reasonable land use to access wood bison.	11
Goal 5: Manage harvest to equitably benefit local resident, nonlocal resident, and nonresident hunters.....	12
Goal 6: Minimize wood bison impact on other wildlife species and the ecosystem on which they depend.	14
Goal 7: Ensure continuing communication among all user groups.	14
Goal 8: Support people interested in establishing more wild wood bison populations in other parts of Alaska. Having wood bison in more herds than one will help the restoration of this magnificent species and can benefit people and the ecosystem.	15
References Cited.....	16

List of Figures

Figure 1. Original range of wood bison in Alaska and Canada based on archeological records, and oral and written history. Adapted from Stephenson et al. (2001).	5
Figure 2. The Alaska wood bison nonessential experimental population (NEP) area and the lower Innoko/Yukon River release site.....	7

This lower Innoko-Yukon Rivers wood bison management plan is the result of a collaborative effort of an eclectic group of Alaskans with a broad range of interests. Two meetings occurred to finalize this management plan: one in October of 2022 and one in October of 2023. Below are 2 lists of the interest groups invited to be a part of the Lower Innoko-Yukon River Wood Bison Management Planning Team and their representative(s). Note that the name of the Team has been updated from previous plans (Alaska Wood Bison Management Planning Team 2015, Alaska Wood Bison Management Planning Team 2022) for this herd to reflect the specific area where wood bison will be restored. Organizations are in alphabetical order.

The 2022 Lower Innoko-Yukon River Wood Bison Management Planning Team and their Representative(s).

Organization	Representative (October 2022)
Alaska Department of Natural Resources	Casey Dinkel (virtual)
Alaska Outdoor Council	Invited but unavailable
Alaska Wild Sheep Foundation	Becky Schwanke (virtual)
Anchorage Advisory Committee	Invited but unavailable
Anvik Tribal Council	Robert Walker
Big Game Commercial Services Board	Pete Buist
Bureau of Land Management Alaska Office	Bruce Seppi (virtual), Craig Townsend
Board of Game	Al Barrette
Calista Corporation	Mary Martinez (virtual)
Central Kuskokwim Advisory Committee	Nick Kameroff
Defenders of Wildlife	Christi Heun
Deloy Ges, Inc. – Anvik	Ernest Demoski
Deloycheet, Inc. – Holy Cross	Byron Turner (virtual)
Doyon Ltd.	Andrew Tunnell
Fairbanks Advisory Committee	Jeff Lucas, Mark Richards
Federal Subsistence Board	Tom Plank (virtual)
Grayling, Anvik, Shageluk, Holy Cross Advisory Committee	Ken Chase
Grayling Tribal Council	Invited but unavailable
Hee-Yea Lingde Corporation – Grayling	Janet Afcan
Holy Cross Tribal Council	Alfred Demientieff Jr.
Innoko National Wildlife Refuge Manager, USFWS	David Zabriskie (virtual)
Mat-Su Advisory Committee	Casey Dinkel
Safari Club International Kenai Chapter	Ted Spraker
Safari Club International Alaska Chapter	Louis Cusack
Shageluk Tribal Council	Scott Wolfersheim
The Kuskokwim Corporation	Jonathan Samuelson (virtual)
U.S. Fish and Wildlife Service	Doug Cooper
Western Interior Regional Advisory Council	Jack Reakoff (virtual)
Yukon Delta Regional Advisory Council	Invited but unavailable
Zho-Tse, Inc. – Shageluk	Flora Deacon

Additionally, Alaska Department of Fish and Game (ADF&G) staff from the Division of Wildlife Conservation were present to provide assistance and information. Those (in alphabetical order) were Jen Curl, Josh Peirce, Luke Rogers, and Tom Seaton. Laurie Boeck was an independent wildlife biologist during the October 2022 meeting and was contracted to help administer the meeting.

Invited guests during the first October 2022 meeting included folks that would later contribute to the first Lower Tanana Planning Team meetings, like Cameron Winfrey, Minto Tribal Council Member and Minto-Nenana Advisory Committee Chairman; Louis Silas, Seth-De-Ya-Ah Corporation representative; Carl Frank, Minto-Nenana Advisory Committee member; Chris Sherry, Lower Tanana Wood Bison Scoping Team member, and Rita St. Louis, who was the Randy Rogers Wood Bison Foundation scholarship program representative.



Lower Innoko-Yukon River Wood Bison Management Planning Team at the October 2022 meeting. Photo by ADF&G.

The 2023 Lower Innoko-Yukon River Wood Bison Management Planning Team and their Representative(s).

Organization	Representative (October 2023)
Alaska Department of Natural Resources	Invited but unavailable
Alaska Outdoor Council	Invited but unavailable
Anchorage Advisory Committee	Invited but unavailable
Anvik Tribal Council	Robert Walker
Bath and Associates	Alistair Bath
Big Game Commercial Services Board	Pete Buist
Board of Game	Al Barrette
Bureau of Land Management Alaska Office	Craig Townsend
Calista Corporation	Mary Martinez, Tisha Kuhns, Paul Anderson, Tim Schuerch, Rose Bennett, Curt Chamberlain (virtual)
Central Kuskokwim Advisory Committee	Nicholas H Kameroff Jr.
Defenders of Wildlife	Christine Heun
Deloy Ges, Inc. – Anvik	Ron Kruger (virtual)
Deloycheet, Inc. – Holy Cross	Byron Turner
Doyon Ltd.	Andrew Tunnell
Ecosystem Services – USFWS	Carol Mahara, Doug Cooper
Fairbanks Advisory Committee	Jeff Lucas
Federal Subsistence Board	Invited but unavailable
Grayling Tribal Council	Bruce Deacon
Grayling, Anvik, Shageluk, Holy Cross Advisory Committee	Ken Chase
Hee-Yea Lingde Corporation - Grayling	Agnes Demientieff
Holy Cross Tribal Council	Invited but unavailable
Innoko National Wildlife Refuge - USFWS	Invited but unavailable
Matanuska Valley Advisory Committee	Invited but unavailable
Middle Yukon Advisory Committee	Fred Huntington
Office of Subsistence Management, USFWS	Thomas Plank
Public Participant	Edna Deacon
Public Participant	Flora Deacon
Region III - ADF&G	Lincoln Parrett
Safari Club International – Alaska Chapter	Louis Cusack
Safari Club International – Kenai Chapter	Invited but unavailable
Shageluk Tribal Council	Scott Wolfersheim
Tanana Chiefs Conference	Michelle Quillin
The Kuskokwim Corporation	Invited but unavailable
Western Interior Regional Advisory Council	Jack Reakoff (virtual)
Wild Sheep Foundation	Rebecca Schwanke
Yukon-Delta Regional Advisory Council	Invited but unavailable
Zho-Tse, Inc. – Shageluk	Peter Walker (virtual)

Additionally, Alaska Department of Fish and Game (ADF&G) staff from the Division of Wildlife Conservation and Subsistence Section were present to provide assistance and information. Those (in alphabetical order) were Alida Trainor, Brooke Fisher (virtual), Jesse Coleman, Luke Rogers, and Tom Seaton.

Dr. Alistair Bath, Memorial University, Newfoundland, provided expert facilitation for the 2015–2020, 2020–2023, and the 2024–2034 wood bison management plan meetings for Lower Innoko-Yukon River area.



Lower Innoko-Yukon River Wood Bison Management Planning Team at the October 2023 meeting. Photo by ADF&G.

Dedication

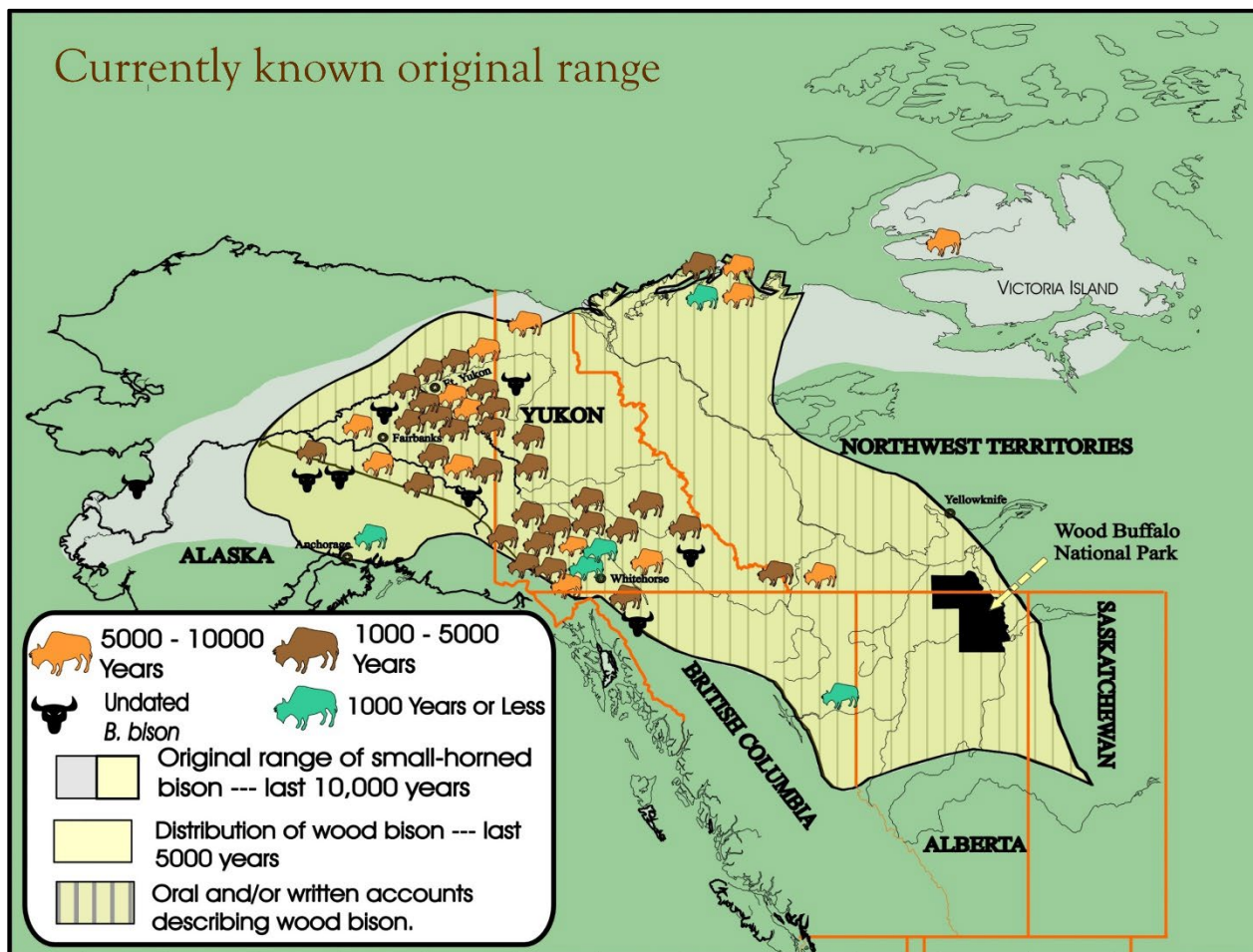
This wood bison management plan is respectfully dedicated to the late Ronnie Silas, Minto-Nenana Advisory Committee member; and Ken Chase; chair of the Grayling, Anvik, Shageluk, and Holy Cross (GASH) Advisory Committee; who gave endless hours and enthusiasm to the project. They have been important contributors to the wood bison restoration success story.

Vision Statement

Through the collaboration of many, manage a sustainable wood bison herd while ensuring a healthy landscape, benefiting all people for future generations.

Background

Wood bison (*Bison bison athabasca*) roamed Alaska for approximately 10,000 years, gradually diminishing in numbers from west to east, and disappearing from Alaska altogether about 200 years ago (Fig. 1). In 1991, ADF&G Wildlife Biologist Bob Stephenson proposed reintroducing wood bison to the Yukon Flats to provide an additional source of red meat for residents of the area (ADF&G 1994). This would simultaneously address the broader conservation goal of restoring free ranging, disease-free wood bison in portions of their original range.



Produced by ADF&G, 2001 using ArcGIS™ software (Esri, Redlands, California); base map sources: ADF&G, ESRI, and USGS.

Figure 1. Original range of wood bison in Alaska and Canada based on archeological records, and oral and written history. Adapted from Stephenson et al. (2001).

In 1969 the U.S. Fish and Wildlife Service (USFWS) listed wood bison as endangered under the Endangered Species Act (ESA). The status was changed to threatened in 2012. ESA requires a range of protections for listed species and their habitats. Concerns about these protections and

associated management requirements resulted in some opposition to restoring wood bison in Alaska. ADF&G worked with USFWS to develop a federal rule which was published in 2014 (Federal Register 2014). This rule designated wood bison in Alaska as a nonessential experimental population (NEP) under section 10(j) of ESA. Sections 10(j) and 4(d) of ESA allow certain kinds of take, including hunting, to provide for the conservation of the species. The federal rule also gives ADF&G primary management responsibility for leading and implementing the restoration effort.

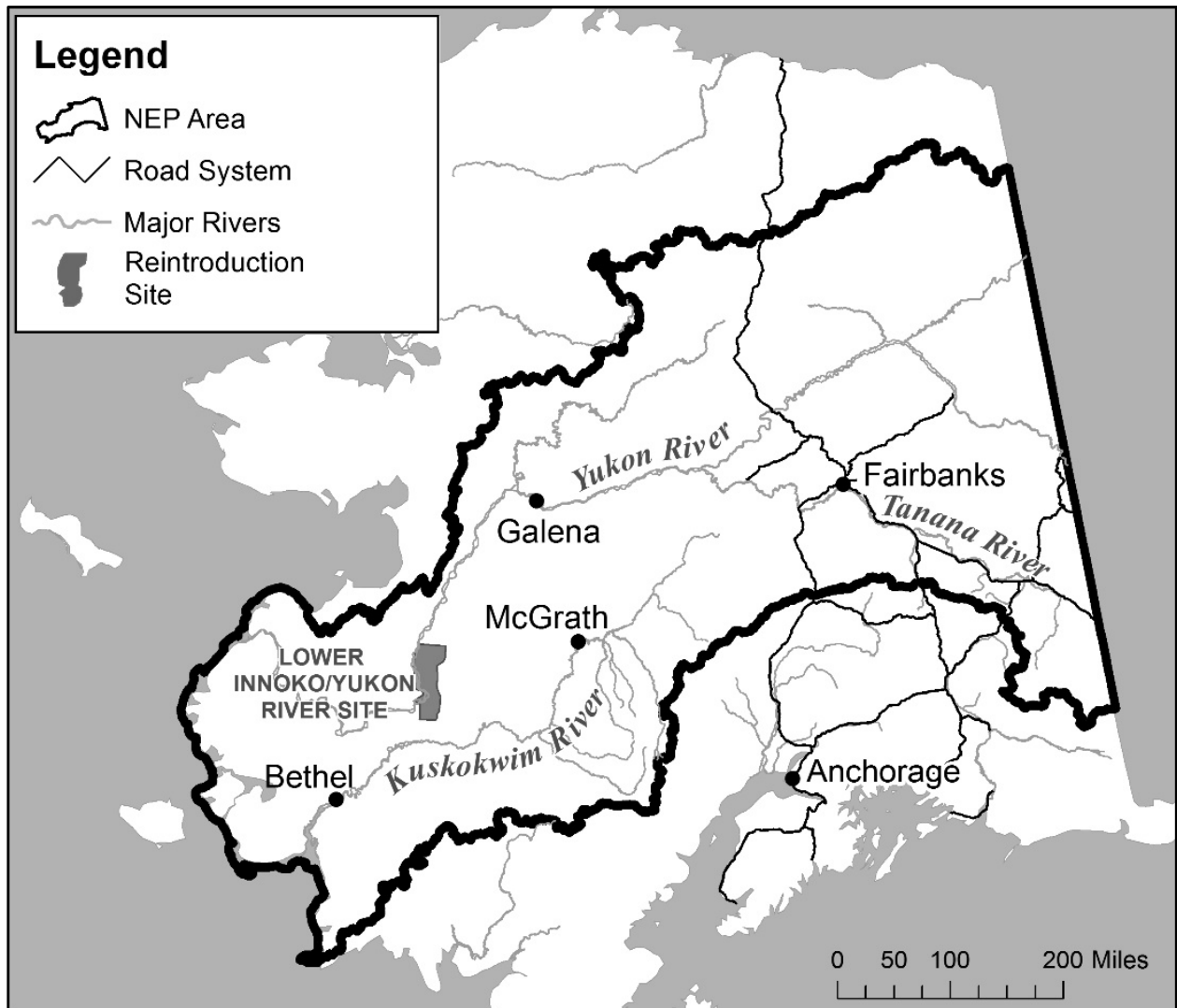
Continued concerns about potential management requirements under the 10(j) NEP classification compelled ADF&G to identify the lower Innoko-Yukon River area as the most appropriate of 3 potential release sites to initiate the restoration project. The Innoko-Yukon area had local communities that strongly supported the project for at least a decade, and the area had not been identified for any large-scale economic development projects.

The final rule for the 10(j) NEP under ESA was published 7 May 2014 by USFWS titled Endangered and Threatened Wildlife and Plants: Establishment of a Nonessential Experimental Population of Wood Bison in Alaska (Federal Register 2014). The full text of the final rule can be viewed at <http://www.fws.gov/policy/library/2014/2014-10506.pdf>.

Under the rule

- Regulated hunting under sustained yield principles is allowed.
- Activities such as resource development, hunting, trapping, and recreation are allowed.
- Designation of “critical habitat” under ESA is not allowed (this provides additional assurance that other land uses will not be affected).
- If a reintroduction effort fails, or in the unlikely event that litigation changes their legal status, the animals may be removed from the landscape.
- ADF&G will be the lead agency in reintroductions, and using scientific knowledge and experience, will have primary responsibility for bison management.
- Management of wood bison in the NEP area will be guided by provisions in
 1. The federal final rule <http://www.fws.gov/policy/library/2014/2014-10506.pdf> (Federal Register 2014).
 2. The associated final environmental assessment http://www.adfg.alaska.gov/static/species/speciesinfo/woodbison/pdfs/environmental_assessment_designation_experimental_population_wood_bison_interior_alaska_2013.pdf (ADF&G 2013).
 3. The ADF&G environmental review http://www.adfg.alaska.gov/static/species/speciesinfo/woodbison/pdfs/er_no_appendices.pdf (ADF&G 2007).
 4. A site-specific management plan (i.e., this document).

In late March and early April of 2015 ADF&G transported and released 100 bison, both adult cows and young bison, along the Innoko River near Shageluk, Alaska (Fig. 2). In May and June of 2015 an additional 30 adult bull bison were also released near the adult cows and young bison. In August of 2022 an additional 28 yearling wood bison were released along the Innoko River and integrated with the other bison. These individuals and their subsequent offspring comprise what is now the lower Innoko-Yukon River Wood Bison Herd.



Produced by ADF&G, 2012, using ArcGIS™ software (Esri, Redlands, California); base map sources: ADF&G, AKDOT, ESRI, and USGS.

Figure 2. The Alaska wood bison nonessential experimental population (NEP) area and the lower Innoko/Yukon River release site.

In addition to other provisions, the federal final rule (Federal Register 2014) states:

“ADF&G will use public planning processes to develop implementation and management plans for wood bison restoration. Planning groups will include representatives from local communities, regional population centers, landowners, Alaska Native interests, wildlife conservation interests, industry, and state and federal agencies, as appropriate for each area. Draft management plans

will be circulated for public review, and final plans will be presented to the Alaska Board of Game and Federal Subsistence Board for review and approval.”

Planning Process

The Lower Innoko-Yukon Rivers Wood Bison Planning Team published a management plan in 2015 to guide the management of this herd (Alaska Wood Bison Management Planning Team 2015). They then updated the 2015 plan with a plan for 2020–2023 (Alaska Wood Bison Management Planning Team 2022). To update the 2020–2023 site-specific management plan, ADF&G invited several interest groups and agencies representing a broad range of interests to select representatives and participate as part of the Lower Innoko-Yukon Rivers Wood Bison Management Planning Team (hereafter referred to as the Team) to update the management plan for wood bison in the lower Innoko-Yukon River area. This included all the invitees from 2020. Most groups sent participants, however, not all interest groups could attend, and a representative was not available from the Alaska Outdoor Council, Anchorage Advisory Committee, Grayling Tribal Council, or Yukon-Delta Regional Advisory Council. All told, 32 groups were invited, and 28 groups were represented.

The Team met for 3 full days and was facilitated by Dr. Alistair Bath of Memorial University, Newfoundland, Canada for 2 of those days. The Team was tasked with updating the management plan for wood bison along the lower Innoko and Yukon Rivers. Although ADF&G provided historical, biological, and regulatory expertise, the plan reflects the desires of the Team.

This plan is the Team’s effort to guide ADF&G, the Board of Game, the Federal Subsistence Board, the Legislature, landowners, and other government agencies concerning restoration of wood bison in this specific area. The goals, objectives, and actions documented here are a direct reflection of the Team’s desires as expressed during the Team’s meetings. This plan is an important part of the wood bison restoration process.

During the 2014 planning team meeting, the Team explored, identified, and addressed key issues facing bison and their management. To do that, it agreed to several tenets. The Team agreed to listen respectfully to each participant’s point of view and to mutually identify compromises or new solutions to resolve a wide range of issues. The Team also agreed to share the concerns of their respective constituents with each other, and then carry the Team’s decisions back to their constituents, advocating for those decisions as needed. Furthermore, Team members agreed to not leave the group if the solutions developed by consensus were not to their liking, and they would not say “yes” if they really were thinking “no.” The Team agreed that because compromise was paramount to the success of a plan, all Team decisions should be by consensus. The Team discussed core values and fleshed out many of these values in detail. Respect for private property and mutual respect for diverse cultural values were deemed important and discussed at length. Likewise, the importance of fairness was discussed at length. The Team rejected the term “equal opportunity” because it implied that all individuals should be treated exactly the same, which the Team agreed simply was not practical. Instead, the Team agreed on the concept of “equitable or balanced opportunity” because it better represented the reality and complexity of landownership, differences in proximity of users to wood bison, and other differences as well. In conclusion, the Team agreed that even if individuals were not treated equally, they could still be treated fairly.

During the October 2022 meeting, the Team highlighted the need to reaffirm the ideas in the wood bison management plan and revisit certain sections to ensure everything was still relevant.

ADF&G gathered a substantial amount of information about the Lower Innoko-Yukon River wood bison during the 7 years since release. This meeting provided another opportunity to inform the Team of ADF&G's findings. A series of presentations were given throughout the meeting by ADF&G Wood Bison Biologist Tom Seaton which outlined the monitoring of the herd. Biological information included the bison release story; movements and grouping since release; bison diet; mortality; productivity; the influence of snow conditions and flooding events; current population numbers including cow-to-calf ratios, bull-to-cow ratios, and yearling recruitment; a forage assessment with a video and discussion; and disease testing. All participants found the information very useful and informative. Publications outlining this biological information are in progress and will be available along with this publication on the ADF&G Wood Bison management and research page (ADF&G Home | Management & Research | Wildlife | Wood Bison Management and Research: <http://www.adfg.alaska.gov/index.cfm?adfg=wildliferesearch.woodbison>).

During the October 2023 meeting, the Team focused primarily on developing a harvest structure that could be recommended to the Board of Game and become regulation so that when the lower Innoko-Yukon rivers wood bison herd provided adequate harvestable surplus in the future, a hunt could be implemented. Once again, ADF&G presented the biological data from the herd to the Team through several PowerPoint presentations, videos, and question-answer sessions.

Moving forward, the Team agreed on ways in which they will operate into the future. The Team emphasized the necessity of regular updates to the planning team. They also agreed to continue working cooperatively in addressing future challenges. It was decided that the time period of this new plan would be 2024–2034 with a review after 5 years by the team either remotely or in-person. The Team recognized that ADF&G would provide annual updates as usually seen on the update page (ADF&G Home | Management & Research | Wildlife | Wood Bison Restoration: <https://www.adfg.alaska.gov/index.cfm?adfg=woodbisonrestoration.herdupdates#woodbison2023>), and that if any significant changes occurred regarding regulations, biology, or harvest, the Team would reconvene.

Goals, Objectives, and Actions

Goal 1: Increase or grow the wood bison herd in the lower Innoko-Yukon River area and manage it for long-term viability.

The Team recognizes that restoring wood bison in Alaska would be a conservation opportunity of state, national, and international importance, providing a broad range of benefits to hunting and nonhunting uses alike. The Team also emphasized the importance of hunting as a management tool.

Objective 1: Add animals whenever feasible and move animals where appropriate to grow this population.

Objective 2: Continue to closely monitor and conservatively manage these wood bison to better understand how the herd adapts to its surroundings including occasional deep snow and flooding.

Objective 3: Conduct ongoing field surveys to monitor the status of the herd.

Action 1 — Conduct field surveys to collect biological data on population size, cow-to-calf ratios, bull-to-cow ratios, productivity, survivorship, age structure, body condition, seasonal movements, and dispersal.

Action 2 — Encourage local residents to share information about known locations of bison with one another and ADF&G for management purposes.

Objective 4: Conduct forage-assessment surveys to monitor the impact of the herd on its habitat.

Objective 5: Continue to ensure that future harvesting of the herd is maintained at a level that does not prevent growth and expansion of wood bison into adjacent areas where suitable habitat exists.

Objective 6: Maintain separation between wood bison and plains bison to prevent interbreeding.

Objective 7: Conduct routine disease testing to monitor the health of wood bison and associated wildlife.

Goal 2: Ensure adequate staffing and funding for all phases of wood bison management.

Objective 1: Continue to support a dedicated ADF&G biologist to intensively monitor wood bison while the herd becomes established in the wild and to ensure well-informed management decisions after the herd has been established.

Objective 2: Ensure that revenue from drawing permit application fees is used to support the wood bison management program.

Objective 3: To the extent possible, ensure available funding is maximized for wood bison.

Goal 3: Minimize conflicts between humans and wood bison.

Much has been learned about conflicts between people and wood bison in Canada. Wood bison rarely attack people and are less likely to do so than moose. Like moose, bison want to move away or avoid people but, if cornered, could become aggressive. Unlike moose, old bison bulls are generally more aggressive than cows with calves.

Lethal removal or harassment of problem wood bison will be guided by state regulations (5 AAC 92.410 “Taking of game in defense of life or property”; 5 AAC 92.033 “Permit for scientific, educational, propagative, or public safety purposes”) and also by federal regulations (50 CFR 17.84 (x)(5)(iv) “What take of wood bison is allowed in the NEP area?”).

Objective 1: Continue to educate all user groups about wood bison and their interactions with people.

Objective 2: Continue to employ established procedures to accurately identify and resolve problem-bison situations.

Action 1 — Lethal removal of wood bison will be allowed in the defense of human life.

Action 2 — Nonharmful harassment of wood bison, in coordination with ADF&G, will be allowed in defense of property.

Objective 3: Maintain the cooperative effort between ADF&G and local communities to develop procedures and train personnel to deal with problem wood bison.

Objective 4: Exempt lethal removal of problem wood bison from harvest quotas.

Goal 4: Encourage cooperation among land managers to ensure reasonable land use to access wood bison.

The land occupied by the lower Innoko-Yukon River wood bison herd is a checkerboard pattern of Bureau of Land Management and Native corporation lands. Native corporation lands are private lands and use by nonshareholders is often prohibited. A land-use policy is desirable to provide opportunity for nonshareholders to use the wood bison resource. The Team agreed that respecting private property rights is an important aspect of allowing reasonable land use for all user groups including local residents, nonlocal residents, and nonresidents. The 2022 planning team assigned a subcommittee mainly based on land ownership in the Grayling, Anvik, Shageluk, and Holy Cross (GASH) area. This subcommittee met in January 2023 and revised the language under this goal.

Objective 1: Provide reasonable land use for all users of wood bison on private Native corporation lands. Access to the wood bison resource by hunters on private lands shall be obtained directly from the local respective landowner corporations. The respective names of these corporations are Zho-Tse (Shageluk), Deloy Ges, Inc. (Anvik), Deloycheet, Inc. (Holy Cross), Hee-Yea Lingde Corporation (Grayling), and Doyon (regional).

Goal 5: Manage harvest to equitably benefit local resident, nonlocal resident, and nonresident hunters.

Restricting hunting on federal land to only federally qualified subsistence hunters or restricting hunting to only those who win a state drawing (lottery) permit will not satisfy the interests of all Alaskans. A hunt structure that supports equitable and reasonable hunting opportunity to local communities as well as to a broader segment of the hunting public including nonlocal residents and nonresidents is preferred and will be addressed through proposals to the Board of Game by the Team.

Monetary contributions from federal, state, and private sources over the past 2 decades for wood bison restoration have been substantial. The willingness of local landowners to allow bison on their lands, as well as the future use of their lands by bison hunters, are substantial commitments. Local residents support the project and must have some assurance of realizing benefits from the wood bison population. There is strong local interest in bison as a source of red meat to augment moose harvests. Additionally, other Alaskans and people outside of Alaska have also made substantial commitments and they too wish to realize benefits from wood bison. It is important to respect cultural differences and diverse interests represented by the Team while recognizing that these deeply held values stem from a shared appreciation of hunting traditions. Therefore, finding a middle ground between the state and federal harvest allocation systems is in the best interests of all participants. On 19 October, in the days preceding the 2023 meeting, USFWS Office of Subsistence Management gave the legal interpretation that the Federal Subsistence Board (FSB) has no authority to set regulations for wood bison because wood bison are an ESA-listed species. This is because FSB's authority is provided under the Alaska National Interest Lands Conservation Act (ANILCA), and ANILCA specifically does not apply to ESA-listed species. Wood bison must be delisted under ESA before FSB can rule on wood bison.

Also, the Team emphasized the philosophical importance of striving for a positive “total hunting experience” which includes enjoying the trip, enjoying the hunt, and sharing the experience.

Objective 1: Enforce regulations and encourage voluntary actions that result in no wasting of meat.

Action 1 — Provide hunters, especially nonlocal hunters, with orientation materials to help them deal with the logistics of removing harvested wood bison from the field.

Objective 2: Establish a hunt structure.

The Team recommended that the initial hunt be 8 permits, composed of 4 locally-issued registration permits (one in each of the four GASH villages), and 4 drawing permits. Then as the number of permits increases, all additional permits would be drawing permits until the registration-to-drawing ratio reached 20:80 to honor the existing ratio created in previous plans. At the point that there were 20 total permits (4 registration and 16 drawing), then the total number of permits would increase with the 20:80 ratio.

The Team recommended that ADF&G estimate harvestable surplus in the following way. In order for a hunt to be held, the population must include: 1) at least 100 bison 1-year old or older, and 2) the ability to maintain a bull-to-cow ratio of at least 60:100 after a harvest of 8 bulls. It

was recognized that this is an extremely conservative harvest strategy, that it might not happen for some time, and that it might not be able to occur in consecutive years. A high bull-to-cow ratio was purposeful because of discussions around genetic diversity in this founder population and how providing natural selection with a broad range of options may help the long-term resilience of this population. It was also recognized that the population survey information would come in the year prior to when the hunt started because of the duration of the drawing permit process. The team recommended that cows not be harvested because that could affect the population's ability to grow.

The Team recommended that the hunt boundary should be Unit 21E and that the open season should be 26 September to 14 February. These dates would avoid overlapping with the moose season (to minimize hunter conflicts) and also avoid late winter (March, April, or May) when winter stress has caused mortality in the past. The Team supported the concept that ADF&G would require some specimens from hunters to help monitor age, sex, and health of the harvested bison. The Team recommended that residents could draw a permit every 10 years and nonresidents could draw 1 per lifetime. The Team recommended that that up to 25% of the drawing permits could be issued to nonresidents and that the registration permits would be for residents only.

The Team recommended that the Board of Game require a strong hunter orientation for the few permit holders that would help new bison hunters understand the following important points about bison hunting in Alaska. The topics discussed were as follows. Bison are very resilient and require excellent shot placement and high-powered firearms to achieve consistent clean kills. A wounded bison that is not recovered counts as a harvested bison on the hunter's tag. Bison sex and age can be differentiated with a few simple characteristics and some patience. Land ownership is complicated in the area. Smart phone apps can aid in understanding ownership while in the field. Permission to access private lands should be sought directly from the landowner, and landowner contacts would be included in the orientation materials. Meat care skills are important; and donating meat, including organs and tongue, to local people would be greatly appreciated. There may be local services available to assist hunters with transportation and meat care.

Action 1 — Provide this management plan to the Board of Game and the Federal Subsistence Board for approval in 2024.

Action 2 — Submit a proposal to the Board of Game in 2026 in preparation for the 2027 Interior meeting to be held in Fairbanks to establish a hunt structure for this population.

Objective 3: Encourage all hunters, especially nonlocal hunters, to share clean, well-cared-for meat with local communities.

Objective 4: Establish hunting regulations to avoid simultaneous hunting of wood bison and moose.

Objective 5: Delay state and federal customary and traditional use determination processes until a hunt history has been established and data are available regarding harvest and use patterns.

Objective 6: Support and encourage the establishment of local infrastructure and support services related to viewing and harvesting activities.

Goal 6: Minimize wood bison impact on other wildlife species and the ecosystem on which they depend.

Much information exists on interactions between wood bison and other wildlife species in the boreal forest environment in Canada. Many of the studies that contain this information are described or cited in the May 2014 federal rule (Federal Register 2014) that provides for the establishment of nonessential experimental populations of wood bison in Alaska, the November 2013 environmental assessment (ADF&G 2013), and the 2007 ADF&G environmental review of wood bison restoration in Alaska (ADF&G 2007). Wood bison are an indigenous species that evolved along with other animal and plant species in the boreal forest. No significant negative impacts of wood bison on species in this environment have been documented to date in Canada or Alaska.

We can learn about interactions between wood bison and other species in the Alaska ecosystem from observing the plains bison in Alaska. As a result of a plains bison introduction effort in Alaska that began in 1928, there are 4 different populations of plains bison in Alaska totaling over 1,000 bison. There have been no significant negative effects documented from plains bison in Alaska during the 96 years since 1928. This further supports that wood bison are unlikely to have negative effects on the environment and other species, because the 2 subspecies of bison interact with their environment in essentially the same way.

Objective 1: Ensure that only certified weed-free feed is used for feeding of bison at soft release sites as part of the release process.

Objective 2: Conduct field inspections for noxious weed species at release sites where bison were fed prior to release.

Objective 3: Reassess and monitor wood bison interactions with their habitat and other species.

Goal 7: Ensure continuing communication among all user groups.

Communication is critical to the success of the wood bison restoration project. In addition to biological parameters, social and political considerations also must continue to be explored.

Objective 1: Maintain positive working relationships among the diverse user groups to help resolve future concerns and issues.

Action 1 — Provide a Team update at least once a year.

Action 2 — Share updates and reports on the status of the wood bison herd and management program with the Team.

Objective 2: Incorporate local knowledge by listening to all user groups about their views toward wood bison and how wood bison interact with people and their habitat.

Objective 3: Involve new communities and interest groups near areas where wood bison might expand.

Objective 4: Recognize that this plan is adaptive and shall be amended to reflect what has been learned since the release.

Objective 5: Continue and encourage additional efforts devoted to helping the public learn about wood bison, the role they play in the northern ecosystem, and the restoration program.

Action 1 — Disseminate existing educational programs such as those developed by ADF&G for grades K–12, and by the Alaska Wildlife Conservation Center and Bear Trust International for grades 7–8.

Action 2 — Make skeleton kits available to school-aged children to learn about bison anatomy and function.

Action 3 — Continue to develop and disseminate new materials as appropriate to educate the public about wood bison.

Goal 8: Support people interested in establishing more wild wood bison populations in other parts of Alaska. Having wood bison in more herds than one will help the restoration of this magnificent species and can benefit people and the ecosystem.



References Cited

- Alaska Department of Fish and Game. 1994. Reintroducing wood bison to the upper Yukon Valley, Alaska: A feasibility assessment. Division of Wildlife Conservation, Fairbanks. https://www.adfg.alaska.gov/static/species/speciesinfo/woodbison/pdfs/reintroducing_wood_bison_upper_yukon_valley_feasibility_1994.pdf
- Alaska Department of Fish and Game. 2007. Wood bison restoration in Alaska: A review of environmental and regulatory issues and proposed decisions for project implementation. Division of Wildlife Conservation, Fairbanks. http://www.adfg.alaska.gov/static/species/speciesinfo/woodbison/pdfs/wood_bison_restoration_alaska_review_2007.pdf
- Alaska Department of Fish and Game. 2013. Environmental assessment: Designation of nonessential experimental population status for wood bison in Interior Alaska, November 18, 2013. Division of Wildlife Conservation, Juneau. http://www.adfg.alaska.gov/static/species/speciesinfo/woodbison/pdfs/environmental_assessment_designation_experimental_population_wood_bison_interior_alaska_2013.pdf
- Alaska Wood Bison Management Planning Team. 2015. Wood bison management plan for lower Innoko / Yukon River in Westcentral Alaska, 2015-2020. Alaska Department of Fish and Game, Division of Wildlife Conservation, Wildlife Management Plan ADF&G/DWC/WMP-2015-1, Fairbanks.
- Alaska Wood Bison Management Planning Team. 2022. Wood bison management plan for lower Innoko-Yukon River in Westcentral Alaska, 2020–2023. Alaska Department of Fish and Game, Wildlife Management Plan ADF&G/DWC/WMP-2022-1, Juneau.
- Federal Register. 2014. Establishment of a nonessential experimental population of wood bison in Alaska, May 7, 2014. Department of Interior, U.S. Fish and Wildlife Service 79(88): 26175–26188. <https://www.govinfo.gov/content/pkg/FR-2014-05-07/pdf/2014-10506.pdf>
- Stephenson, R. O., S. C. Gerlach, R. D. Guthrie, C. R. Harington, R. O. Mills, and G. Hare. 2001. Wood bison in late Holocene Alaska and adjacent Canada: Paleontological, archaeological and historical records. Pages 124–158 [In] S. C. Gerlach, and M. S. Murray, editors. People and wildlife in northern North America: Essays in honor of R. Dale Guthrie. BAR International Series 944, Archaeopress, Oxford, England.

